

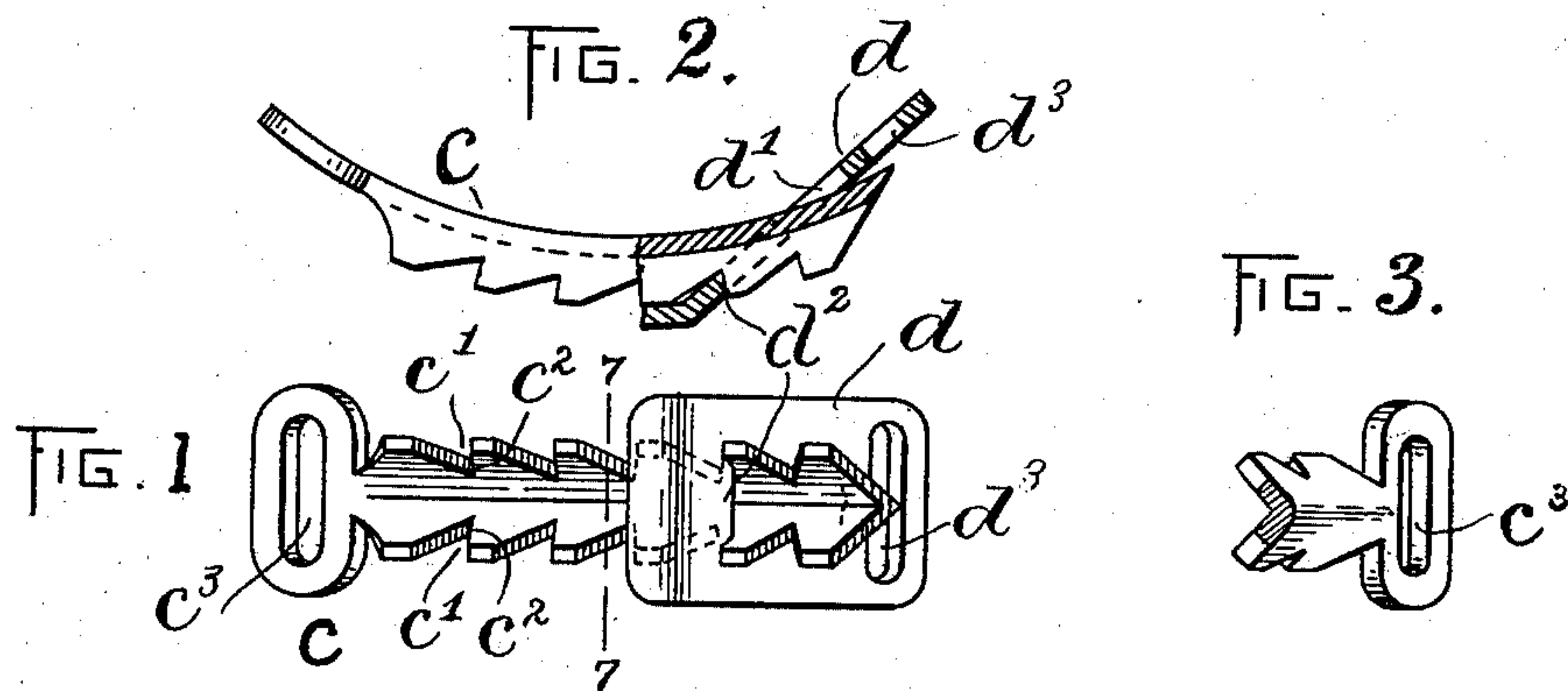
No. 705,823.

Patented July 29, 1902.

N. CRANE.  
CLASP OR FASTENER.

(Application filed Dec. 12, 1898.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

NEWTON CRANE, OF BOSTON, MASSACHUSETTS.

## CLASP OR FASTENER.

SPECIFICATION forming part of Letters Patent No. 705,823, dated July 29, 1902.

Application filed December 12, 1898. Serial No. 899,015 (No model.)

*To all whom it may concern:*

Be it known that I, NEWTON CRANE, of Boston, in the county of Suffolk and State of Massachusetts, (whose post-office address is 112 Water street, Boston, Massachusetts,) have invented certain new and useful Improvements in Clasps or Fasteners, of which the following is a specification.

This invention has relation to clasps or fasteners, and while particularly adapted for use on shoes and those overshoes which are known as "arctics" yet may be equally well employed for securing together the parts of a garment or any other article.

The object of the invention is, primarily, to provide a fastener whose members may be attached and detached with readiness and with little exertion and which will not become accidentally displaced while subjected to ordinary wear and usage, and, secondarily, to provide a clasp or fastener in which the parts shall consist of two members each formed of an integral strip or piece of metal died or stamped into shape, whereby expensive machine work may be obviated and the cost of producing the fastener be made relatively low.

To these ends the invention consists of a fastener of the character described possessing certain features of construction and relative arrangement of parts, all as illustrated upon the accompanying drawings, described in the following specification, and pointed out in the claims hereto appended.

Reference is to be had to the accompanying drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 represents in plan view a clasp or fastener embodying my invention. Fig. 2 represents a plan view, partially in section, of the same. Fig. 3 represents a transverse section of one member on the line 7 7 of Fig. 1.

In carrying out this invention I employ two members, one of which is elongated and is provided with a plurality of engaging parts, and the other is apertured to receive the first said member and to form a shoulder or part to engage any one of the engaging parts formed on the first-mentioned member. The

elongated member may be formed in a variety of ways, being ordinarily curved to fit the curvature of the shoe at the front of the ankle, the essential features of the other member being the aperture through which the first member is passed, whereby the second member can bear against the front and rear faces of the said elongated member and the shoulder for engaging any one of the engaging parts thereof.

In the drawings the member *c* is formed of sheet metal. It is first stamped or died out with a plurality of notches *c' c'* at its edges, which form a plurality of engaging parts or shoulders *c<sup>2</sup> c<sup>2</sup>*. The body portion of this member is bent at its median line to cause the two sets of notches to lie at an angle to each other, whereby said member presents in cross-section the appearance of a V. Thus there are formed two ribs, as it were, each provided with a plurality of engaging shoulders *c<sup>2</sup>*. The rear or outer end of the said member is flat and is provided with an aperture *c<sup>3</sup>*, whereby it may be secured to an arctic, as previously set forth. The member *c* is curved longitudinally or in the direction of its length, so as to fit the curve of the ankle.

The member *d* consists of a flat metallic plate having a triangular aperture *d'* to receive the member *c*. The inner walls of the aperture form a shoulder *d<sup>2</sup>* to engage the shoulders or engaging parts *c<sup>2</sup> c<sup>2</sup>* of the member *c*. This member *d* has the usual aperture *d<sup>3</sup>* at its outer or rear end.

The manner of engaging and disengaging the members *d* and *c* will be readily understood. The member *d* is held at an angle and the member *c* is passed through it, after which the two members are moved to cause the engaged portion *d<sup>2</sup>* of the member to engage the teeth of the member *c*. The tension exerted by the two parts of the upper of a shoe or the two flaps of an arctic tends to hold the members firmly engaged, although, if desired, they may be disengaged by lifting the bent end of the member *d*, so as to release the engaging member *d<sup>2</sup>* from the teeth of the member *c*.

According to this invention the elongated member, which passes through apertures in the flat member, is very strong and is not liable to be bent out of shape in case it is



stepped on. Although I have described the said members as being provided with eyelets on their outer or rear ends, yet it will be understood that other provisions may be made for attaching the members in place, this feature of the invention being immaterial.

In addition to the flat member having an aperture to receive the elongated member it is also bent at its front or inner end so as to lie flat upon the front face of the said elongated member, the rear wall of its aperture resting against the rear face of the last-mentioned member and forming a fulcrum to secure the engagement of its shoulder or shoulders with any one of the plurality of shoulders of the elongated member.

Having thus explained the nature of the invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is—

1. A clasp member V shape in cross-section and having provisions at its outer end for attachment to a shoe or arctic, said member being elongated, and having two separated parallel series of upwardly or outwardly projecting engaging shoulders.

2. A clasp member having provisions at its

outer or rear end for attachment to a shoe or arctic, said member being elongated and having its edges bent outward and notched to provide a plurality of engaging shoulders or parts.

3. A clasp member having provisions at its outer end for attachment to a shoe or arctic, said member being longitudinally curved and V-shaped in cross-section, and being provided with two parallel rows of upwardly or outwardly projecting engaging shoulders, which extend substantially from end to end of said member.

4. A clasp or fastener consisting of two members having provisions at their outer ends for attachment to a shoe or arctic, one member having two separated parallel rows of engaging upwardly or outwardly projecting shoulders, and the other member being substantially flat and being adapted to receive the first-mentioned member and having an engaging portion for the shoulders of each row of said first-mentioned member.

In testimony whereof I have affixed my signature in presence of two witnesses.

NEWTON CRANE.

Witnesses:

MARCUS B. MAY,  
P. W. PEZZETTI.